

Work Order ID 114394

March-04-14 3:04:29 PM

114394

Page 1

Item ID: D350-591-312

Revision ID:

Item Name: Heli-Access-Step™ RH

Start Date: 14/04/2014 Start Qty: 10.00

Required Date: 14/04/2014 Req'd Qty: 10.00

Reference:

Approvals:

Process Plan:

Date: 14-03-08

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

NR1

Stop

NR2

N900040100

Setup

Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3272

Rev B

100

Document Control

0.00

100

DC

DOCUMENT CONTROL

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile and type labels as per PPP D350-591-312 CHG001

DAS
31
9-89

14-04-16

MLJ 14-04-16

3

110

0.00

110

Large Fab

Large Fab

Memo

0.00

Large Fab

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod 125127

3-Grind End Plate flush

10

φ

14-03-26

QQA: _____ Date: _____


WORK ORDER NON-CONFORMANCE / UPDATE

DA
AEROSPACE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION		AGAINST DEPARTMENT/PROCESS			
	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	
	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>		

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	14-04-14	110	7	welded on thin wall side - 7 parts group NCR.	14-04-14	replace with new 140			5 14/05/01 
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General		
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Folio/Program	<input type="checkbox"/> Outside Dimensions
<input type="checkbox"/> Centre Not Concentric	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain	<input type="checkbox"/> Over/Under tolerance
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Hardware	<input type="checkbox"/> Part Incorrect
<input type="checkbox"/> Crimp/Kink/Ripple/Wave	<input type="checkbox"/> Burrs	<input type="checkbox"/> Inspection Incomplete/Unqualified	<input type="checkbox"/> Part Lost/Missing
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Moved
<input type="checkbox"/> Crushing	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misaligned/off center	<input type="checkbox"/> Positioned Wrong
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Power Loss/Surge
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Drawing	<input type="checkbox"/> Misread	<input type="checkbox"/> Set-up
<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Off-set	<input type="checkbox"/> Temperature/Cure
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Calibration	<input type="checkbox"/> Weld
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Fit/Function	<input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Wrong Stock Pulled
			<input type="checkbox"/> Other

March-04-14 3:04:29 PM

Page 2

Setup Start *NS1*

Stop *NS2*

Stop *NS2*

Cust Item ID:

Customer:

Reference:

Run Start *NR1*

Stop *NR2*

120

QC9- Inspect visual per QSI004- Fusion Welds

0.00

120

QC

Memo

0.00

Quality Control

DAS
43
9-89

14-04-01

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0.00

Quality Control

DAS
43
9-89

14-04-01

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.00

Hand Finishing

10 261447

Work Order ID 114394

114394

Page 3

March-04-14 3:04:29 PM

Item ID: D350-591 312

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Heli-Access-Step™ RH

Start Date: 14/04/2014 Start Qty: 10.00

10

Cust Item ID:

Required Date: 14/04/2014 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

150 QC7-Inspect Chemical Conversion Coat 0.00

150

QC

Memo

0.00

Quality Control

10	14-04-07	DAS
		9
		9-89

180

0.00

180

Large Fab

Large Fab

Memo

0.00

Large Fab

1-Assemble Leg Assembly as per Dwg D3272.

2-Leave one rivet out until welding is complete.

3-Bevel Aft end for welding.

4-Inspect for foreign object as per QSI 024

5-Weld Aft End Plate as per QSI 004 & Dwg D3272
A/RAluminum Rod M12SD91

6-Grind End Plate flush

7-Install last rivet as per Dwg.

3	14-04-08	PD
---	----------	----

Work Order ID 114394

114394

Page 4

March-04-14 3:04:29 PM

Item ID: D350-591-312 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Heli-Access-Step™ RH
 Start Date: 14/04/2014 Start Qty: 10.00 *10* Cust Item ID:
 Required Date: 14/04/2014 Req'd Qty: 10.00 *10* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *190* QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00 0.00 DAS 27 9-89 14/4/14				3			
200 *200* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00 DAS 27 9-89 14/4/14				3			
210 *210* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				3			14/4-14

Work Order ID 114394

114394

Page 5

March-04-14 3:04:29 PM

Item ID: D350-591-312

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Heli-Access-Step™ RH

Start Date: 14/04/2014 Start Qty: 10.00

10

Cust Item ID:

Required Date: 14/04/2014 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
220	<i>M 128007</i>	0.00				<i>3</i>	<i>φ</i>	<i>14-4-14</i>	
Powdercoat	Memo								
Powder Coating	START TIME: <i>11:20</i>								
	OVEN TEMPERATURE: <i>320°</i>								
	FINISH TIME: <i>11:50</i>								
230	Wing Walk as per dwg QSI005 4.4 Batch <i>28623</i>	0.00							
230		0.00				<i>3</i>	<i>φ</i>	<i>OP</i>	<i>14/04/14</i>
HandFinish	Memo								
Hand Finishing									
240	QC3- Inspect Part Finish	0.00							
240		0.00				<i>3</i>			
QC	Memo								
Quality Control									

DAS
34
9.88

Work Order.ID 114394

March-04-14 3:04:29 PM

114394

Page 6

Item ID: D350-591-312

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Heli-Access-Step™ RH

Start Date: 14/04/2014 Start Qty: 10.00 *10*

Cust Item ID:

Required Date: 14/04/2014 Req'd Qty: 10.00 *10*

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250	Pick Kit	0.00							
250						3x	DAS 28 9-89	APR 16 2014	
Packaging	Memo	0.00							
Packaging									
260	QC4- 100% Inspect kits for completeness	0.00							
260							3x		
QC	Memo	0.00							
Quality Control									
270		0.00							
270	Packaging					34			DAS 06 9-89
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD350-591-312								
	Location: <u>BAI</u>								

APR 16 2014

DAS
31
9-89

APR 16 2014

DAS
06
9-89

Work Order-ID 114394

114394

Page 7

March-04-14 3:04:29 PM

Item ID: D350-591-312 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Heli-Access-Step™ RH
 Start Date: 14/04/2014 Start Qty: 10.00 *10* Cust Item ID:
 Required Date: 14/04/2014 Req'd Qty: 10.00 *10* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
280	QC21- Final Inspection - Work Order Release	0.00							
280									
QC	Memo	0.00							
Quality Control									

MLJ 14-04-16

MLJ 14-04-16

Picklist Print

March-04-14 3:04:28 PM

Page 1

Work Order ID: 114394

114394

Parent Item: D350-591-312

D350-591-312

Parent Item Name: Heli-Access-Step™ RH

Start Date: 14/04/2014

Required Date: 14/04/2014

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A04.03.22New issue KJ/RF
 IPP Rev:B 07-06-09 Added D3572-1 JLM
 IPP Rev:C 08-04-02 ECN1163 DD verified by:EC
 IPP Rev:D 08-04-08 ECN1164 DD verified by:EC IPP Rev:D
 fixe route seq in bom DD 10.04.28 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3272-1		Manufactured	No			110	Each	0.0000	1	10			
D3272-1					B114508 = 7 B114506 = 3				**			Ac 14-03-20 (x10)	
Step													
D3067-1		Manufactured	No			110	Each	141.0000	1	10			
D3067-1									**			14-03-26	
End Plate													
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					WA003			141					
					101785			67					
					102686			74		10			
D3219-1		Manufactured	No			110	Each	137.0000	2	20			
D3219-1									**			14-03-26	
Plate													
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					WA003			137					
					112125			137		20			
D3066-1		Manufactured	No			180	Each	43.0000	2	20			
D3066-1									**			14-04-07 PD	
Spacer													
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					WA003			43					
					106302			23					
					112583			20					

Picklist Print

March-04-14 3:04:28 PM

Work Order ID: 114394

114394

Parent Item: D350-591-312

D350-591-312

Parent Item Name: Heli-Access-Step™ RH

Start Date: 14/04/2014

Required Date: 14/04/2014

Start Qty: 10.00

Required Qty: 10.00

MS20600-AD4W4

Purchased

No

180

Each

1,837.000

16

160

MS20600-AD4W4

Rivets

**

160 14-04-07 PD

Location

Loc Qty

Loc Code

ST311

1837

125577

1837

160

D3065-041

Manufactured

No

180

Each

19.0000

1

10

D3065-041

Step Leg Assembly

**

10 14-04-07 PD

Location

Loc Qty

Loc Code

WA003

19

102830

6

108770

10

109447

3

613075 -> 10

D3067-1

Manufactured

No

180

Each

141.0000

1

10

D3067-1

End Plate

**

10 14-04-07 PD

Location

Loc Qty

Loc Code

WA003

141

101785

67

102686

74

10

AN3-35A

Purchased

No

250

Each

67.0000

2

20

AN3-35A

Bolt

**

DAS 06 9-89

DAS 28 9-89

APR 16 2014

Location

Loc Qty

Loc Code

FG

10

122800

10

ST352

57

m127460

1

m128300

56

128634

Picklist Print

April-16-14 7:57:05 AM

Page 2

Work Order ID: 114394

114394

Parent Item: D350-591-312

D350-591-312

Parent Item Name: Heli-Access-Step™ RH

Start Date: 4/14/14

Required Date: 4/14/14

Start Qty: 3.00

Required Qty: 3.00

AN3-35A

Purchased No

250

Each

329.0000

2 6

AN3-35A

Bolt

**

DAS

28
9-89

Location

Loc Qty

Loc Code

FG

10

122800

10

ST352

19

m127460

1

m128300

18

ST512

300

m128634

300

D3235-1

Manufactured No

250

Each

194.0000

2 6

D3235-1

Mounting Lug

**

DAS

28
9-89

APR 16 2014

Location

Loc Qty

Loc Code

ST470

194

102818

15

105939

104

108670

75

D3278-041

Manufactured No

250

Each

115.0000

1 3

D3278-041

Support Assembly

**

DAS

28
9-89

Location

Loc Qty

Loc Code

ST469

73

111885

33

114169

40

ST470

42

102349

1

109406

1

114940

40

April-16-14 7:57:05 AM

Shop Packet Print

Page 2

Picklist Print

April-16-14 7:57:05 AM

Page 3

Work Order ID: 114394

114394

Parent Item: D350-591-312

D350-591-312

Parent Item Name: Heli-Access-Step™ RH

Start Date: 4/14/14

Required Date: 4/14/14

Start Qty: 3.00

Required Qty: 3.00

NAS1149D0463J

Purchased

No

250

Each

7,447.000

16

48

NAS1149D0463.J

WASHER

**

DAS
28
9-89

APR 16 2014

Location

Loc Qty

Loc Code

ST294

127

M127693

127

ST510a

7320

M127813

22

M127904

3000

M128591

4298

48X

NAS1149D0563J

Purchased

No

250

Each

4,666.000

4

12

NAS1149D0563.J

Washer

**

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

201

m125807

201

ST510a

4465

m126319

2465

m128257

2000

12X

AN5-36A

Purchased

No

250

Each

342.0000

2

6

AN5-36A

Bolt

**

DAS
28
9-89

Location

Loc Qty

Loc Code

ST338

1

M126105

1

st503

341

M127410

11

M127460

100

M128850

230

6X

April-16-14 7:57:06 AM

Shop Packet Print

Page 3

Picklist Print

April-16-14 7:57:06 AM

Page 4

Work Order ID: 114394

114394

Parent Item: D350-591-312

D350-591-312

Parent Item Name: Heli-Access-Step™ RH

Start Date: 4/14/14

Required Date: 4/14/14

Start Qty: 3.00

Required Qty: 3.00

D2618

Manufactured No

250

Each

387.0000

2 6

**

DAS
28
9-89

APR 16 2014

D2618

Bushing

Location

Loc Qty

Loc Code

ST013

387

103863

5

108671

50

114872

206

97780

126

6x

D2230-3

Manufactured No

250

Each

337.0000

4 12

**

DAS
28
9-89

D2230-3

Mounting Lug

Location

Loc Qty

Loc Code

FG

7

109344

4

89045

3

ST469

330

108668

137

109344

193

12x

D2856-400

Manufactured No

250

f

307.0100

1.2 4

**

DAS
28
9-89

D2856-400

Abrasion Strip 4" Wide (Per Foot)

Location

Loc Qty

Loc Code

ST403

307.01

109578

91.01

112524

216

4x

April-16-14 7:57:06 AM

Shop Packet Print

Page 4

Picklist Print

April-16-14 7:57:06 AM

Page 5

Work Order ID: 114394

Parent Item: D350-591-312

Parent Item Name: Heli-Access-Step™ RH

114394

D350-591-312

Start Date: 4/14/14

Required Date: 4/14/14

Start Qty: 3.00

Required Qty: 3.00

MS21042L3

Purchased

No

250

Each

8,614.000

2

6

MS21042L3

Nut

**

DAS
28
9-89

APR 16 2014

Location

Loc Qty

Loc Code

ST314

1659

M127410

618

M127831

41

M128401

1000

ST506

955

123900

955

ST509

6000

M128754

6000

AN4-13A

Purchased

No

250

Each

2,556.000

8

24

AN4-13A

Bolt

**

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

20

122808

20

GA

14

m125709

14

ST515

2522

m127432

36

m127817

486

m128403

1000

m128739

1000

April-16-14 7:57:06 AM

Shop Packet Print

Page 5

Picklist Print

April-16-14 7:57:06 AM

Page 6

Work Order ID: 114394

114394

Parent Item: D350-591-312

D350-591-312

Parent Item Name: Heli-Access-Step™ RH

Start Date: 4/14/14

Required Date: 4/14/14

Start Qty: 3.00

Required Qty: 3.00

MS21042L5

Purchased

No

250

Each

1,655.000

2

6

MS21042L5

Nut

**

DAS
28
9-89

APR 16 2014

Location

Loc Qty

Loc Code

GA

5

117611

5

ST315

150

m127304

150

ST509

1500

m127813

500

m128810

1000

6X

MS21042L4

Purchased

No

250

Each

8,847.000

8

24

MS21042L4

Locknut

**

DAS
28
9-89

DAS
08
9-89

Location

Loc Qty

Loc Code

ST314

44

m126015

12

m126275

32

ST509

8792

m127255

71

m127813

1083

m128300

2638

m128798

5000

ST518

11

m127376

11

24X

April-16-14 7:37:06 AM

Shop Packet Print

Page 6

Picklist Print

April-16-14 7:57:06 AM

Page 7

Work Order ID: 114394

114394

Parent Item: D350-591-312

D350-591-312

Parent Item Name: Heli-Access-Step™ RH

Start Date: 4/14/14

Required Date: 4/14/14

Start Qty: 3.00

Required Qty: 3.00

NAS1149D0363J

Purchased

No

250

Each

5,323.000

4

12

3 *NAS1149D0363.J*

Washer

**

DAS
28
9-89

APR 16 2014

Location

Loc Qty

Loc Code

GA

23

124392

23

ST510a

5300

m126319

130

m127813

170

m128429

5000

12x

DAS
31
9-89